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infectious cycle; or a portion of said 19 kilodalton (pl9) C-Terminal fragment, other than a fragment from *Plasmodium vivax,* which induces an immune response which can inhibit parasitemia *in vivo* in a host infected with said *Plasmodium* parasite, wherein said C-terminal fragment remains anchored to the surface of said Plasmodium parasite at the end of its penetration phase into human erythrocytes during an infectious cycle and wherein said recombinant protein comprises conformational epitopes recognized by human antisera, contains two epidermal growth factor regions and is unstable in a reducing agent.

118. (New) The recombinant protein of Claim 117, which is not recognized by said human antisera when said recombinant protein is in a reduced form.

119. (New) The recombinant protein of Claim 117, wherein said 19 kilodalton (p 19) C-terminal fragment of the surface protein 1 of the merozoite form (MSP-1 protein) has the atomic coordinates in Annexes I, II or III; and the NMR fingerprints of Figures 12.0a to 12.2c.

120. (New) The recombinant protein of Claim 117, which elicits a long term memory response against said conformational epitopes in animals.

121. (New) The recombinant protein of Claim 117, which does not contain a polypeptide having a sequence of amino acids in the C-Terminal region of p33 (33 kDa N-terminal fragment).

122. (New) The recombinant protein of Claim 117, which comprises, upstream of said 19 kilodalton (pl9) C-terminal fragment, a polypeptide region containing less than 50 amino acids of a C-terminal region of p33.

123. (New) The recombinant protein of Claim 122, wherein said polypeptide region is the C-terminal region of p33 resulting from the cleavage of p42 of the same MSP-1 protein.

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124. (New) The recombinant protein of Claim 122, wherein said polypeptide region contains less than 10 amino acid residues.

125. (New) The recombinant protein of Claim 123, wherein said C-terminal region is that region that is conserved in *P. falciparum*.

126. (New) The recombinant protein of Claim 117, wherein said polypeptide has a glycosylphosphatidylinositol group which anchors the pl9 fragment to the membrane of a eukaryotic cell infected with the MSP-1 protein.

127. (New) The recombinant protein of Claim 126, which is hydrosoluble.

128. (New) The recombinant protein of Claim 117, wherein said polypeptide comprises the amino acid sequence of the pl9 of the MSP-1 protein from *Plasmodium falciparum*.

129. (New) The recombinant protein of Claim 117, wherein said polypeptide comprises the amino acid sequence of the pl9 of the MSP-1 protein from *Plasmodium cynomolgi*.

130. (New) A recombinant protein whose essential constituent polypeptide sequence comprises:

a 19 kilodalton (pl9) C-terminal fragment of the surface protein 1 of the merozoite form (MSP-1 protein) of a *Plasmodium* cynomolgi parasite that is infectious in man, which induces an immune response which can inhibit parasitemia *in vivo* in a host infected with said *Plasmodium* parasite; wherein said recombinant protein comprises conformational epitopes recognized by human antisera, contains two epidermal growth factor regions and is unstable in a reducing agent.

131. (New) An oligomer of the recombinant protein of Claim 117.

132. (New) The oligomer of Claim 131, wherein said oligomer comprises from 2 to

D1 50 monomer units of a sequence of said recombinant protein.

133. (New) The recombinant protein of Claim 117, which is conjugated to a carrier molecule.

134. (New) A vaccinating composition against a *Plasmodium* parasite which is infectious in man, comprising as an active principle a recombinant protein whose essential constituent polypeptide sequence comprises:

a) a 19 kilodalton (pl9) C-terminal fragment of the surface protein 1 of the merozoite form (MSP-1 protein) of a *Plasmodium* parasite that is infectious in man, other than *Plasmodium vivax,* wherein said C-terminal fragment remains anchored to the surface of said *Plasmodium* parasite at the end of its penetration phase into human erythrocytes during an infectious cycle; or a portion of said 19 kilodalton (pl9) C-Terminal fragment, other than a fragment from *Plasmodium vivax,* which induces an immune response which can inhibit parasitemia *in vivo* in a host infected with said *Plasmodium* parasite; wherein said C-terminal fragment remains anchored to the surface of said plasmodium parasite at the end of its penetration phase into human erythrocytes during an infectious cycle and wherein said recombinant protein comprises conformational epitopes recognized by human antisera, contains two epidermal growth factor regions and is unstable in a reducing agent; and

b) alum.

135. (New) The vaccinating composition of Claim 134, wherein said recombinant protein is not recognized by human antisera in reduced form.

136. (New) The vaccinating composition of Claim 134, wherein said 19 kilodalton (p 19) C-terminal fragment of the surface protein 1 of the merozoite form (MSP-1 protein) has the atomic coordinates in Annexes I, II or III; and the NMR fingerprints of Figures 12.0a to 12.2c.

137. (New) The vaccinating composition of Claim 134, which elicits a long term memory response against said conformational epitopes in animals.

138. (New) The vaccinating composition of Claim 134, which does not contain a polypeptide having a sequence of amino acids in the C-Terminal region of p33 (33 kDa N-terminal fragment).

139. (New) The vaccinating composition of Claim 134, which comprises, upstream of said 19 kilodalton (pl9) C-terminal fragment, a polypeptide region containing less than 50 amino acids of a C-terminal region of p33.

140. (New) The vaccinating composition of Claim 139, wherein said polypeptide region is the C-terminal region of p33 resulting from the cleavage of p42 of the same MSP-1 protein.

141. (New) The vaccinating composition of Claim 139, wherein said polypeptide region contains less than 10 amino acid residues.

142. (New) The vaccinating composition of Claim 140, wherein said C-terminal region is that region that is conserved in *P. falciparum*.

143. (New) The vaccinating composition of Claim 134, wherein said polypeptide has a glycosylphosphatidylinositol group which anchors the pl9 fragment to the membrane of a eukaryotic cell infected with the MSP-1 protein.

144. ~~(New) The vaccinating composition of Claim 143, which is hydrosoluble.~~

145. (New) A vaccinating composition against a *Plasmodium* parasite which is infectious in man, comprising as an active principle a recombinant protein whose essential constituent polypeptide sequence comprises:

a) a 19 kilodalton (pl9) C-terminal fragment of the surface protein 1 of the merozoite form (MSP-1 protein) of a *Plasmodium cynomolgi* parasite that is infectious in man, and

D1 wherein said recombinant protein comprises conformational epitopes recognized by human antisera, contains two epidermal growth factor regions and is unstable in a reducing agent; and

b) alum.

146. (New) The vaccinating composition of Claim 145, wherein said polypeptide comprises the amino acid sequence of the pl9 of the MSP-1 protein from *Plasmodium falciparum*.

147. (New) The vaccinating composition of Claim 145, wherein said polypeptide comprises the amino acid sequence of the pl9 of the MSP-1 protein from *Plasmodium cynomolgi*.

148. (New) The vaccinating composition of Claim 134, which is conjugated to a carrier molecule.

149. (New) The vaccinating composition of Claim 113, wherein said 19 kilodaltan (p 19) C-terminal fragment of the surface protein 1 of the merozoite form (MSP-1) protein a) has the atomic coordinates in Annexes I, II or III; and the NMR fingerprints of Figures 12.0a to 1.2c.

Concluded

REMARKS

Claims 68-116 have been cancelled. New Claims 117-149 have been added and are now active and under consideration in this case.

REQUEST FOR RECONSIDERATION

Applicatns gratefully acknowledge the indication by Examiner Turner at page 2 of the Official Action that all rejections not reiterated therein have been withdrawn.